

**Notice of Allowability**

Application No.

09/751,614

Examiner

Alonzo Chambliss

Applicant(s)

GENG ET AL.

Art Unit

2814

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 8/12/04 and interview summary filed on 9/9/04.
2. ☒ The allowed claim(s) is/are 18-24,28,31-43 and 45.
3. ☒ The drawings filed on 28 December 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |                                                                                                                     |                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                         | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                                |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>9/9/04</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                                        |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance                                  |
|                                                                                                                     | 9. <input type="checkbox"/> Other _____.                                                                   |

**DETAILED ACTION**

**EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Marcus J. Millet on September 9, 2004.

2. The application has been amended as follow:

IN CLAIMS:

Cancel claim 47.

In claim 18, lines 6-8, delete " wherein the geometric centers of vias of adjacent lands are offset in substantially a same direction with respect to the geometric centers of the corresponding lands " and insert instead -- wherein the lands comprise a first group having vias whose geometric centers are offset in a first direction with respect to the geometric centers of the corresponding lands of the first group, wherein the lands comprise a second group having vias whose geometric centers are offset in a second direction with respect to the geometric centers of the corresponding lands of the second group, wherein the first direction is opposite to the second direction --;

In claim 21, line 9, after " the second group, " insert -- and wherein the first direction is opposite to the second direction --;

In claim 28, lines 5-7, delete “ wherein the geometric centers of vias of adjacent lands are offset in substantially a same direction with respect to the geometric centers of the corresponding lands ” and insert instead -- wherein the lands comprise a first group having vias whose geometric centers are offset in a first direction with respect to the geometric centers of the corresponding lands of the first group, wherein the lands comprise a second group having vias whose geometric centers are offset in a second direction with respect to the geometric centers of the corresponding lands of the second group, and wherein the first direction is opposite to the second direction --;

In claim 34, lines 4 and 5, delete “ and wherein the geometric centers of vias of adjacent lands are offset in substantially a same direction with respect to the geometric centers of the corresponding lands ” and insert instead -- wherein the lands comprise a first group having vias whose geometric centers are offset in a first direction with respect to the geometric centers of the corresponding lands of the first group, wherein the lands comprise a second group having vias whose geometric centers are offset in a second direction with respect to the geometric centers of the corresponding lands of the second group, and wherein the first direction is opposite to the second direction --;

In claim 42, lines 1 and 2, delete “ lands and ”;

In claim 43, line 9, delete “ and ”;

In claim 43, line 10, after “ sides of the centerline ” insert – , and wherein the first direction is different from the second direction --.

**SPECIFICATION:**

In line 7, delete “ 09/712996 ” and insert instead -- 09/712,996 --;


In line 8, after "METHODS" insert --, filed on November 15, 2000, now U.S.  
Patent No 6,429,389 --.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning the communication or earlier communications from the examiner should be directed to Alonzo Chambliss whose telephone number is (571) 272-1927. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 308-7956.

AC/September 9, 2004

  
Alonzo Chambliss  
Primary Patent Examiner  
Art Unit 2814